

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with strikethrough. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please AMEND claims 1, 6 and ADD new claims 8 and 9 in accordance with the following:

1. (CURRENTLY AMENDED) A partial reprojection method for use in a three-dimensional CAD system, the method comprising:

generating a two-dimensional projection by projecting an assembly model formed of a plurality of parts;

grouping two-dimensional elements in the two-dimensional projection for each part of the assembly model;

adding in advance, as part information, attributes of each part of the assembly model to the two-dimensional projection as part information required for a reprojection, the attributes part information including a part name, a line of sight, and a position of each part of the assembly model, the part information being obtained when the assembly model is projected;

loading a modified three-dimensional part model generated by modifying a shape of a three-dimensional part model that is a part of the assembly model;

deciding a projecting direction of the modified three-dimensional part model based on a line of sight of a part to be reprojected included in the part information;

deciding a generating position of two-dimensional elements of the modified three-dimensional part model based on a position of the part to be reprojected included in the part information; and

-reprojecting performing, based on the decided projecting direction and the decided generating position, the reprojection of the modified three-dimensional part model to generate a modified two-dimensional projection based on the decided projecting direction and the decided generating position.

2. (PREVIOUSLY PRESENTED) The partial reprojection method according to claim 1, further comprising:

adding, to the two-dimensional projection, projection information including information

about a loaded model and a projected model; and

deciding which should be performed, an entire reprojection based on the assembly model or a partial reprojection based on the modified three-dimensional part model in accordance with the projection information, wherein:

if the partial reprojection is decided to be performed, only the shape is changed and the part information and the projection information are not changed; and

if the entire reprojection is decided to be performed, a projection direction of the assembly model is decided based on the projection information.

3-5. (CANCELLED)

6. (CURRENTLY AMENDED) A computer-readable medium storing a program for a three-dimensional CAD system, the program causing a computer perform:

generating a two-dimensional projection by projecting an assembly model;

grouping two-dimensional elements in the two-dimensional projection for each part of the assembly model formed of a plurality of parts;

adding in advance, as part information, attributes of each part of the assembly model to the two-dimensional projection as part information required for a reprojection, the attributes part information including a part name, a line of sight, and a position of each part of the assembly model, the part information being obtained when the assembly model is projected;

loading a modified three-dimensional part model generated by modifying a shape of a three-dimensional part model that is a part of the assembly model;

deciding a projecting direction of the modified three-dimensional part model based on a line of sight of a part to be reprojected included in the part information;

deciding a generating position of two-dimensional elements of the modified three-dimensional part model based on a position of the part to be reprojected included in the part information; and

reprojecting performing, based on the decided projecting direction and the decided generating position, the reprojection of the modified three-dimensional part model to generate a modified two-dimensional projection based on the decided projecting direction and the decided generating position.

7. (PREVIOUSLY PRESENTED) The computer-readable medium according to claim 6, the program causing the computer to further perform:

adding, to the two-dimensional projection, projection information including information about a loaded model and a projected model; and

deciding which should be performed, an entire reprojection based on the assembly model or a partial reprojection based on the modified three-dimensional part model in accordance with the projection information; wherein:

if the partial reprojection is decided to be performed, only the shape is changed and the part information and the projection information are not changed; and

If the entire reprojection is decided to be performed, a projection direction of the assembly model is decided based on the projection information.

8. (New) A partial reproduction method for use in a three-dimensional CAD system, the method comprising

generating a two-dimensional projection by projecting an assembly model formed of a plurality of parts;

grouping two-dimensional elements in the two-dimensional projection for each part of the assembly model;

adding in advance attributes of each part of the assembly model to the two-dimensional projection as part information required for a reprojection, the part information including a part name, a line of sight, and a position of each part of the assembly model, the part information being obtained when the assembly model is projected;

loading a modified three-dimensional part model generated by modifying a shape of a three-dimensional part model that is a part of the assembly model;

deciding a projecting direction of the modified three-dimensional part model based on a line of sight of a part to be reprojected included in the part information;

deciding a generating position of two-dimensional elements of the modified three-dimensional part model based on a position of the part to be reprojected included in the part information; and

performing, based on the decided projected direction and the decided generating position, the reprojection of the modified three-dimensional part model to generate a modified two-dimensional projection of the assembly model reflecting modifications included in the modified three-dimensional part model.

9. (New) The partial reprojection method according to claim 8, further comprising:

adding to the two-dimensional projection, projection information including information about a loaded model and a projected model; and

deciding, in accordance with the projection information, which should be performed, an entire reprojection based on the assembly model or a partial reprojection based on the assembly model or a partial reprojection based on the modified three-dimensional part model so as to reflect the modification included in the modified three-dimensional part model, wherein

if the partial reprojection is decided to be performed, only the shape is changed and the part information and the projection information are not changed; and

if the entire reprojection is decided to be performed, a projection direction of the assembly model is decided based on the projection information.